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(19) **United States**(12) **Patent Application Publication**  
**Knight**(10) **Pub. No.: US 2002/0184875 A1**(43) **Pub. Date: Dec. 12, 2002**(54) **PRESSURIZER FOR A ROCKET ENGINE**(52) **U.S. Cl. .... 60/259**(76) **Inventor: Andrew F. Knight, Washington, DC (US)**(57) **ABSTRACT**

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The present invention provides for a pressurizer for pressurizing a fluid, comprising a pressurant entrance for the introduction of a pressurant, a fluid entrance for the fluid, a fluid exit for the fluid, and a transfer chamber movable in a cycle with respect to the fluid exit, where for a portion of a cycle the pressurant exerts a force on the fluid inside the transfer chamber. In a preferred aspect of the present invention, the pressurizer further comprises a spindle housing more than one transfer chamber, rotatable about an axis between the fluid entrance and the fluid exit. In another preferred aspect, the transfer chamber comprises either a flexible membrane or a movable piston to separate the pressurant and the fluid.

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